General Specifications

Item	Specification
Pressure Plate	
Pressure plate diameter (3.8L)	280 mm (11.0 in)
Pressure plate diameter 4.6L (2V)	280 mm (11.0 in)
Pressure plate diameter 4.6L (4V)	280 mm (11.0 in)
Clutch Disc	
Clutch diameter (3.8L) 280 mm (11.0 in)	Number of springs: 5 plain Color identification: none
Clutch diameter (4.6L 2V) 280 mm (11.0 in)	Number of springs: 4 plain Color identification: none
Clutch diameter (4.6L 4V) 280 mm (11.0 in)	Number of springs: 5 plain Color identification: no paint daub
Fluid and Lubricants	
Motorcraft Premium Long-Life Grease XG-1-C or equivalent	ESA-M1C75-B

Torque Specifications

Description	Nm	lb-ft
Pressure plate to flywheel bolt (3.8L)	33	24
Pressure plate to flywheel bolts 4.6L (2V)	45 + 60°	33 + 60°
Pressure plate-to-flywheel bolts 4.6L (4V)	45 + 60°	33 + 60°

Clutch

The primary function of the clutch is to couple and uncouple engine power to the transmission upon driver command. For additional information, refer to Section 308-02 .

- The clutch is a single plate, dry friction clutch disc. The clutch disc has a splined hub (with integral torsional dampening springs) which attaches the clutch disc to the input shaft.
- Engine output is coupled to the input shaft by the friction existing between the clutch disc facings and the flywheel/clutch pressure plate assembly. The extent of this friction is directly related to the composition of the facing material and the magnitude of the clamping force exerted by the clutch pressure plate. These factors limit the amount of torque that can be transmitted without slippage.
- The clamping force is obtained from a diaphragm spring contained within the clutch pressure plate assembly. This force is developed during the attachment of the clutch pressure plate to the flywheel.
- The clutch system is disengaged when the clutch pedal is depressed and engaged when the clutch pedal is released. This displacement removes the spring load from the clutch pressure plate and eliminates the coupling friction between the engine and the transmission.
- When the clutch pedal is depressed, a cable connected to the clutch release lever, hub and bearing actuates the clutch pressure plate diaphragm spring, releasing pressure on the clutch disc. This eliminates the engagement between the transmission and the engine.

Clutch

Refer to Section 308-00 .

Disc and Pressure Plate —3.8L and 4.6L (2V) Engines

Special Tool(s)

ST1926-A	Clutch Aligner 308-020 (T74P-7137-K)

Material

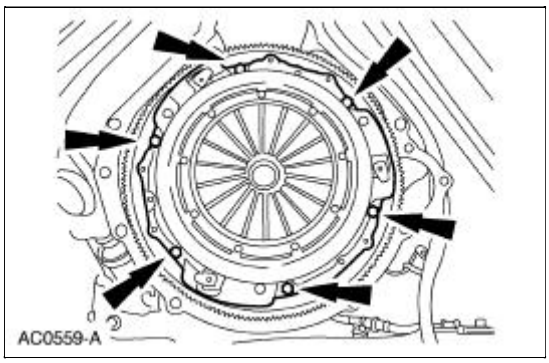
Item	Specification
Premium Long Life Grease XG-1-C	ESA-M1C75-B

1. Remove the transmission. For additional information, refer to Section 308-03A (T5OD) or Section 308-03B (TR3650).

2. **CAUTION: Loosen the bolts evenly to prevent clutch pressure plate damage.**

   NOTE: If the parts are to be reused, mark the clutch pressure plate and the flywheel.

   Remove the bolts and remove the clutch pressure plate and the clutch disc.

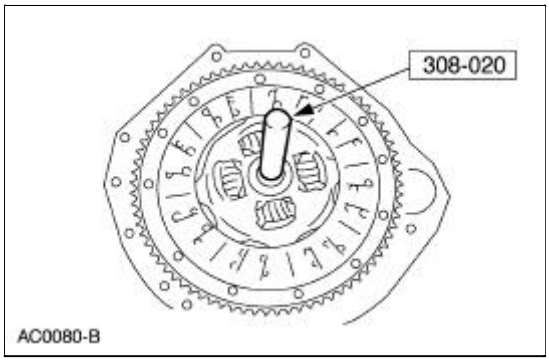


Installation

NOTE: Clean the clutch pressure plate and flywheel with a commercial alcohol-based solvent so surfaces are free from oil film.

Do not use cleaners with a petroleum base. Do not immerse the clutch pressure plate in the solvent.

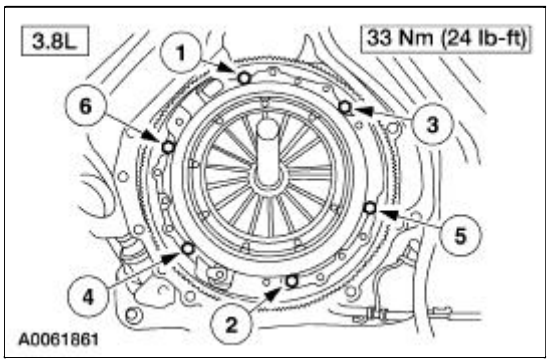
1. Position the clutch disc on the flywheel.
   - Using the special tool, align the clutch disc.

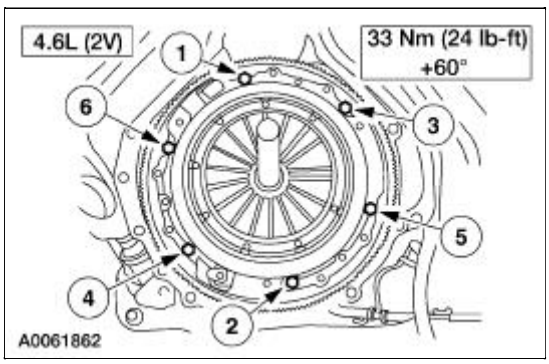


2. **NOTE:** If reusing the clutch pressure plate, align the plate using the marks made during removal.

   Using the special tool, align the clutch pressure plate and install it on the dowels.

   - Install the bolts in the sequence shown.
   - Remove the special tool.



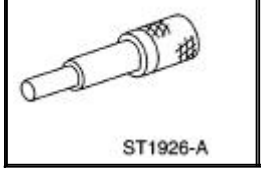


3. **NOTE:** Before installing the transmission, the ball stud, the clutch release lever and the input shaft must be cleaned and lubricated with grease.

   Install the transmission. For additional information, refer to Section 308-03A (T5OD) or Section 308-03B (TR3650).

Disc and Pressure Plate —4.6L (4V) Engine

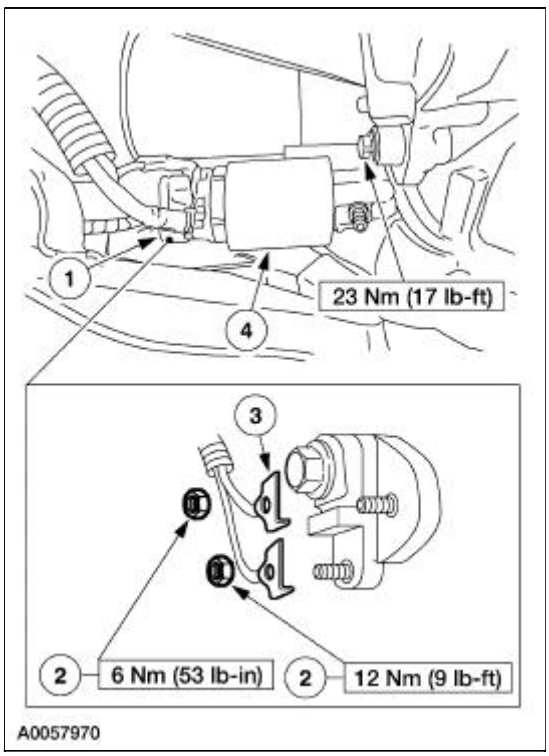
Special Tool(s)

 ST1926-A	Clutch Aligner 308-020 (T74P-7137-K)

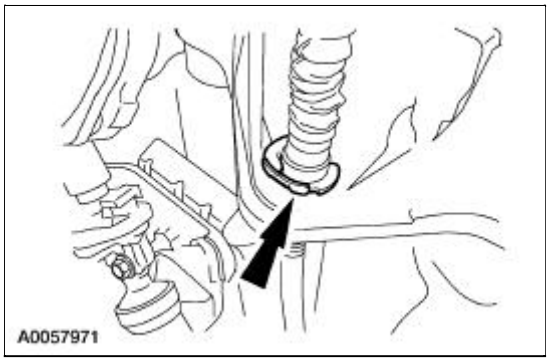
Material

Item	Specification
Premium Long Life Grease XG-1-C	ESA-M1C75-B

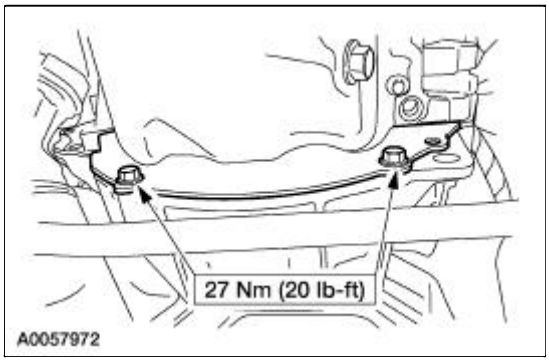
1. Disconnect the battery ground cable. For additional information, refer to Section 414-01 .
2. Remove the transmission. For additional information, refer to Section 308-03C .
3. Remove the starter.
    1. Remove the terminal cap.
    2. Remove the nuts.
    3. Remove the wires and position them aside.
    4. Remove the two bolts and the starter.



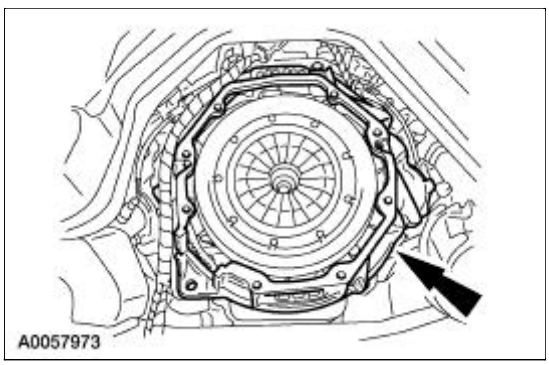
4. Remove the clutch cable clip, then pull the cable through the clutch housing.



5. Remove the two bolts and the inspection cover.



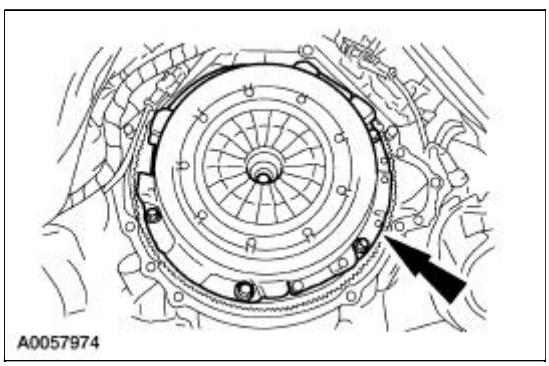
6. Remove the seven bolts and the clutch housing.



7. **CAUTION: Loosen the bolts evenly to prevent damage to the pressure plate.**

   NOTE: If the pressure plate is to be reused, index-mark the pressure plate to the flywheel.

   Remove the six bolts and the pressure plate and disc.



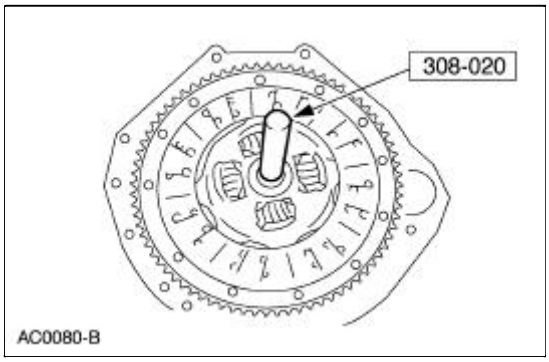
Installation

1. **NOTE:** Clean the clutch pressure plate and flywheel with a commercial alcohol-based solvent so surfaces are free from oil film. Do not use cleaners with a petroleum base.

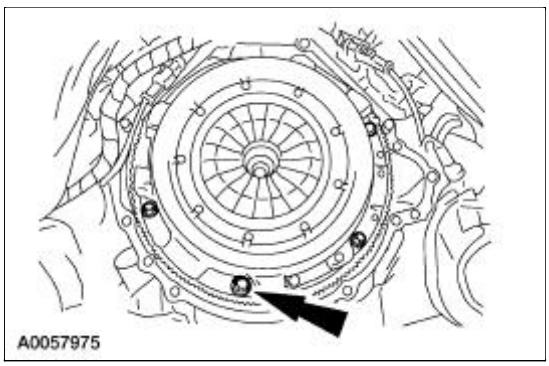
   NOTE: Before installing the transmission, the ball stud, the clutch release lever and the input shaft must be cleaned and lubricated with grease.

   To install, reverse the removal procedure.

   - Using the special tool, align the clutch disc and pressure plate to the flywheel.



2. Tighten the pressure plate bolts in two stages.
   - Stage 1: Tighten the bolts to 45 Nm (33 lb-ft).
   - Stage 2: Tighten the bolts an additional 60 degrees.



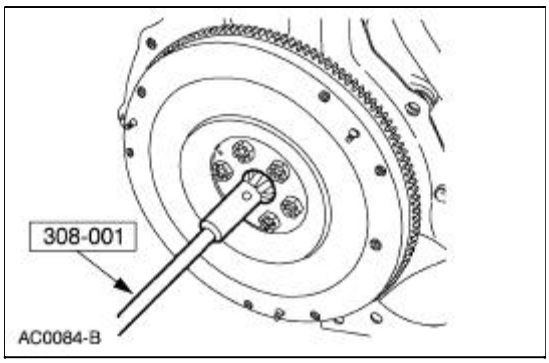
Pilot Bearing

Special Tool(s)

ST1282-A	Puller with Slide Hammer 308-001 (T58L-101-B)

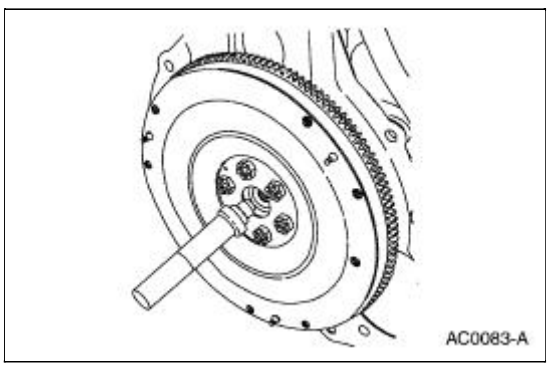
1. Remove the clutch disc and the clutch pressure plate. For additional information, refer to Disc and Pressure Plate—3.8L and 4.6L (2V) Engines or Disc and Pressure Plate—4.6L (4V) Engine in this section.

2. Using the special tool, remove the pilot bearing from the flywheel.



Installation

1. Insert the pilot bearing into the crankshaft.



2. Install the clutch disc and the clutch pressure plate. For additional information, refer to Disc and Pressure Plate—3.8L and 4.6L (2V) Engines or Disc and Pressure Plate—4.6L (4V) Engine in this section.

Flywheel Ring Gear

Removal

1. Remove the flywheel. For additional information, refer to Section 303-01A , Section 303-01B or Section 303-01C .

2. **WARNING: This procedure should be carried out only by a correctly equipped and experienced acetylene torch operator. Tongs must be used or asbestos gloves worn when handling the heated flywheel ring gear. Failure to follow these instructions can result in personal injury.**

   CAUTION: Tap the flywheel ring gear evenly to prevent binding.

   Remove the flywheel ring gear from the flywheel.

   - Evenly heat the flywheel ring gear with an acetylene torch and use a brass drift to drive the flywheel ring gear off the flywheel.

Installation

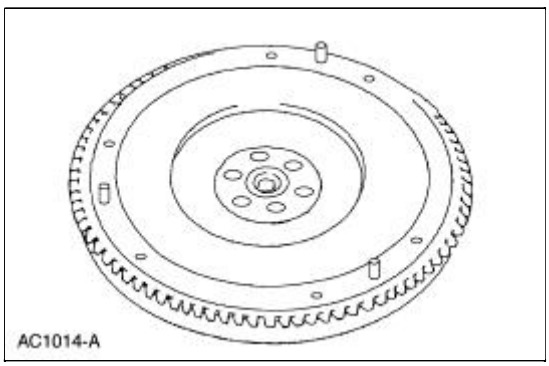
1. **WARNING: This procedure should be carried out only by a properly equipped and experienced acetylene torch operator. Tongs must be used or asbestos gloves worn when handling the heated flywheel ring gear. Failure to follow these instructions can result in personal injury.**

   CAUTION: Do not heat the flywheel ring gear beyond 261°C (500°F). Use heat-indicating crayons to prevent overheating.

   CAUTION: Keep the torch moving to prevent hot spots.

   Evenly heat the flywheel ring gear with an acetylene torch.

   - Install the flywheel ring gear with the bevel on the flywheel ring gear facing the rear of the flywheel.
   - Use a brass drift to tap the flywheel ring gear into position, reheat as necessary.



2. Install the flywheel. For additional information, refer to Section 303-01A , Section 303-01B or Section 303-01C .